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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------|------------------|
| 10/530,069   | 10/10/2005  | Sundar Raman         | ST02014USU<br>(168-US-U1) | 7545             |
| 34408 7590 10/24/2008<br>THE ECLIPSE GROUP LLP<br>10605 BALBOA BLVD., SUITE 300<br>GRANADA HILLS, CA 91344 |             |                      |                           |                  |
| EXAMINER   |             |                      |                           |                  |
| NGUYEN, NGA X  |             |                      |                           |                  |
| ART UNIT   |             | PAPER NUMBER         |                           |                  |
| 3662   |             |                      |                           |                  |
| MAIL DATE  |             | DELIVERY MODE        |                           |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/530,069

## Applicant(s)

RAMAN ET AL.

## Examiner

NGA X. NGUYEN

## Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-39, 44-59 and 79-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 30-39, 44-59, & 79-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roh (2004/0196183) in view of Park (2003/0231132), and further in view of Stratton (6570531).

With regard to claim 30, 79, Roh discloses:

- Assigning each GPS satellite ID corresponding to each received GPS signal from the received plurality of GPS signals to an individual channel of the multi channel GPS receiver (see page 4, paragraph 46).
- The multi channels GPS receiver being programmed to search satellites signals with different levels of sensitivity search (see page 8-9, paragraph 95-100).

Park discloses:

- Assigning each GPS satellite ID corresponding to each received GPS signal from the received plurality of GPS signals to an individual channel of the multi channel GPS receiver (see page 3-4, paragraph 51-55).
- The multi channel GPS receiver selecting channels to search and determine the chosen satellites (see page 4, paragraph 55-56).

Stratton discloses:

- A monitoring processing channel to monitor the position, velocity and time (PVT) data to detect position error of satellite signals (see column 3, lines 23-60).

It would have been obvious to modify Roh by incorporating the teaches of Park to select channels to search and further the teaching of Stratton's apparatus to have monitoring channel so as the system is able to monitoring signals entering from satellites.

With regard to claim 31 & 80, Park teaches utilizing a visible list to assign each GPS SAT ID to each individual channel (see page 4, paragraph 35).

With regard to claim 32-34 & 81-83, Park teaches that the selecting includes selecting first non-assigned channel, the channel assigned to a lowest elevation SAT upon assignment to all channels (see column 4-6, lines 56-90).

With regard to claim 35 & 84, Park teaches:

- Determining the position of the multi-channel GPS receiver (see page 1, paragraph 5-10).
- Monitoring a channel assigned to a SAT ID with a low C/No (see page 4, paragraph 57-58).

With regard to claim 36 & 85, Stratton teaches that monitoring includes determining a false lock at the channel (see column 3, lines 41-59).

With regard to claim 37-39, & 86-88 Park teaches determining whether a GPS SAT ID is assigned to the monitoring channel (see page 5, paragraph 84), and searching the remaining SATs in the GPS constellation after all the common SATs are searched (see page 4, paragraph 55).

With regard to claim 44, 49, 54 & 59, Roh discloses:

- Assigning each GPS satellite ID corresponding to each received GPS signal from the received plurality of GPS signals to an individual channel to the multi channel GPS receiver (see page 4, paragraph 46).
- The multi channels GPS receiver being programmed to search satellites signals with different levels of sensitivity search (see page 8-9, paragraph 95-100).
- Generating a weak list of GPS satellites from the received plurality of GPS satellites (see page 10-11, paragraph 104-110).
- Generating a search list of GPS satellites from the weak list of GPS satellites (see page 9, paragraph 97).
- Determining whether a strong GPS satellite signal exists from the received plurality of GPS signals (see page 10, paragraph 104).

Park discloses:

- Selecting a channel of the multi channel GPS receiver to track and determine the chosen satellites' information (see page 4, paragraph 55-56).

Stratton discloses:

- A monitoring processing channel to monitor the position, velocity and time (PVT) data to detect position error of satellite signals (see column 3, lines 23-60).

It would have been obvious to modify Roh by incorporating the teaching of Park's apparatus and further the teaching of Stratton's apparatus to have monitoring channel so as the system is able to monitoring weak signals entering from satellites.

With regard to claim 45-48, 50-53 & 55-58, Roh teaches:

- Determining a weak GPS satellite signal from the received plurality of GPS signals (see page 7, paragraph 83).
- Generating the weak list of GPS satellites including the weak GPS satellite (see page 10-11, paragraph 104-110).
- Comparing and generating the search list of GPS satellites (see page 8-9, paragraph 93-94).
- Determining a Doppler frequency for the weak GPS satellite signal and generating a Doppler list of Doppler frequency values from the determined weak GPS satellite signal (see page 11-13, paragraph 112-121).

### ***Response to Amendment***

2. Applicant's reply to the Office Action on 07/15/2008 has been fully considered but they are not persuasive.

With respect to claim 30-59, 79-88, applicant argues that the prior arts failed to teach the amended claims that the monitored channel employed a low sensitivity search.

Response: The application's arguments are moot in view of the new grounds of the rejection using same prior arts from the previous action. See above paragraph that the prior arts such as Rod disclose:

- The multi channels GPS receiver being programmed to search satellites signals with different levels of sensitivity search (see page 8-9, paragraph 95-100) which meets the claims.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NGA X. NGUYEN** whose telephone number is (571)272-5217. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **TARCZA H. THOMAS** can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGA X NGUYEN  
Examiner  
Art Unit 3662

NXN

/Thomas H. Tarcza/

Supervisory Patent Examiner, Art Unit 3662